



Docket No: 4-30598/A
Sys-2068
Serial No. 09/237,291

#4/a
chr
8-1399

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: L. Murray et al.)
Serial No.: 09/237,291) Art Unit: 1636
Filed On: January 25, 1999) Examiner: M. Schmidt

For: **EXPANDED AND GENETICALLY MODIFIED POPULATIONS OF HUMAN HEMATOPOIETIC STEM CELLS**

CERTIFICATE OF MAILING BY "FIRST CLASS MAIL"

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, DC 20231, on August 3, 1999

Chris Carter
Chris Carter

AMENDMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

In response to the office action dated May 12, 1999, please amend the above-identified application as follows:

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In the Claims:

Sub B1
18.(amended) A method for genetically modifying [a] human hematopoietic stem [cell] cells, comprising

a
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(a) contacting a [gene delivery vehicle] vector comprising a polynucleotide sequence encoding a heterologous gene with a population of hematopoietic stem cells cultured in the presence of an effective amount of a mpl ligand and a flt3 ligand each provided in a concentration range of about 0.1 ng/mL to about 500 ng/mL,

wherein said vector is selected from the group consisting of retroviral vectors, adenoviral vectors,